just how Verizon VA should or could adapt its engineering practices to achieve the proposed higher utilization levels without service degradation.

Petitioners focus in particular on Verizon VA's average [VERIZON VA

PROPRIETARY BEGIN [VERIZON VA PROPRIETARY END] fill for distribution, insisting that it should be 60%. Yet, as noted above, even the MSM distribution fill is not 60%, but 52.5%, suggesting that even Petitioners could not create a network with a 60% distribution fill. The value reported by Verizon VA reflects the reasonable amount of spare capacity necessary to serve Virginia demand efficiently while meeting the service quality standards imposed on Verizon VA. The primary factor in distribution utilization is not growth, but the need to accommodate subscribers' needs for multiple lines in a timely manner. (VZ-VA Ex. 122 at 114.) This is difficult because demand is unpredictable: the number of houses in a development may be fixed, but the number of lines that the residents of those houses will want at any given time is not predictable. (See, e.g., Tr. at 4112-13.) As Mr. Gansert explained, in order to meet its regulatory obligations in Virginia, Verizon VA must build distribution facilities so that they are positioned in advance to serve potential demand that may develop in each living or business unit at any point in time; this concept of "ultimate demand" thus does not relate to prebuilding for growth, but to building sufficient capacity to serve the varying potential demand at each customer location in a given area. (Tr. at 4116-17.)

Verizon VA follows the efficient practice of building distribution facilities with at least two pairs of distribution cables per subscriber "to avoid the prohibitive cost and delay associated with installing a new cable each time a group of subscribers on a particular street orders an above-average number of additional lines." (VZ-VA Ex. 107 at 115.) As Mr. Gansert explained, this practice "has been used in the entire LEC industry for almost 30 years and was based upon

experience and studies that have been done over those years to determine the most efficient way to build" the distribution plant. (Tr. at 4203.) Verizon VA's average distribution utilization rates are due in large part 108/ to the difference between the efficient construction of two or more distribution pairs per subscriber and the actual average utilization in Virginia of 1.18 pairs per subscriber. (VZ-VA Ex. 107 at 115.) In addition, a variety of other factors specific to Verizon VA's provision of service to Virginia customers, (such as the need to satisfy service quality standards in Virginia and the effects of Virginia customer churn, contribute to Verizon VA's average distribution utilization rate. (VZ-VA Ex. 122 at 118-23.) As the Commission has recognized, fill factors prescribed for cost proceedings should account for such state-specific considerations. 109/

AT&T/WorldCom have offered no evidence demonstrating that Verizon VA's existing distribution plant contains inefficient or unreasonable levels of spare capacity. Their only apparent attempt to do so consists of the naked, unsupported assertion that, "[u]nder scorchednode, for those areas where demand for additional lines has remained stable and is likely to remain so going forward, fewer spare facilities can be provisioned, resulting in more efficient use and higher utilization levels." (AT&T/WCom Ex. 12 at 47.) Apparently, Petitioners believe that the new, scorched node network could look at past demand served by the incumbent and be designed more tightly so as to serve just that amount of demand in just the locations where it exists today. The problem, of course, is that such a tightly designed new network could be defunct in a day, because past demand is a poor predictor of tomorrow's need at specific

Verizon VA also adjusted its utilization rate for distribution by 10% to account for breakage. (VZ-VA Ex. 107 at 112-13.)

Massachusetts § 271 Order at 9007 \P 39.

customer locations. There is no basis for assuming, for example, that the neighborhood in which customers have rarely ordered two lines will not suddenly sprout teenagers needing second lines for surfing the Internet.

Petitioners' critique of Verizon VA's [VERIZON PROPRIETARY BEGIN]

[VERIZON PROPRIETARY END] utilization factor for fiber strand is equally without merit.

Fiber strand utilization is driven primarily by breakage and the need for spare ribbons to perform rearrangements and maintenance. Most fiber cables are manufactured with the individual fiber strands sealed in groups of 12, called "ribbons." Because it is so much easier to work with whole ribbons than individual strands, it is more cost-effective to allocate and dedicate fiber by ribbon, even if this produces significant spare strand due to breakage. Thus, while a remote terminal may require only four strands, it is more efficient to dedicate the full ribbon and leave eight spare strands than to divide the ribbon into individual strands and resplice them individually to use at other sites. (VZ-VA Ex. 107 at 109.) In addition to breakage, fiber strand utilization is driven by the need to have spare fiber ribbons available for use when an individual ribbon fails in order to avoid service outages. (VZ-VA Ex. 122 at 131.)

AT&T/WorldCom's proposed fiber utilization factor of 100% fails to account for either of these primary drivers. In effect, AT&T/WorldCom assume "that you could build a perfectly sized and allocated fiber network in which every fiber was used . . . [with] no capability to ever provide any other service to any other person who wanted service." (Tr. at 4501-02 (Gansert).) In Mr. Gansert's words, this "just patently defies common sense." (Tr. at 4502.) Neither argument Petitioners mount to defend their position has any merit whatsoever.

AT&T/WorldCom contend that both DSL and dark fiber services will consume the strands that Verizon VA has labeled "spare." (AT&T/WCom Ex. 12 at 52.) But this is simply not the case

— and even if either service drove utilization up, *neither* could have anywhere near a great enough impact to drive fiber strand utilization to 100%. Standard DSL is a copper-based technology that would have no impact on fiber strand utilization, and Verizon VA has no plans to offer fiber-based DSL services. (VZ-VA Ex. 122 at 132.) And Petitioners have offered nothing but speculation that they or other CLECs will increase their demand for dark fiber sufficiently to affect fiber strand utilization. (VZ-VA Ex. 122 at 133.)

Finally, Petitioners criticize Verizon VA's [VERIZON PROPRIETARY BEGIN]

[VERIZON PROPRIETARY END] utilization factor for underground ducts. Given the relatively low incremental cost of installing an additional duct during the initial installation of a conduit section, the high cost of installing additional ducts at a later date, and the fact that municipalities typically discourage repeated excavations, "it is far more efficient and appropriate to install sufficient duct capacity at that time to accommodate the growth needs for the life of the plant than it is to repeatedly re-dig trenches every few years to install additional duct capacity."

(VZ-VA Ex. 122 at 141-42.) Other factors, such as the need for spare ducts in case of a duct failure or flood, also counsel in favor of maintaining a sufficient amount of spare duct capacity. (VZ-VA Ex. 122 at 142.)

AT&T/WorldCom's criticisms of Verizon VA's duct utilization factor miss the point entirely. They attempt to minimize current costs by insisting that only one spare duct per conduit section should be installed, notwithstanding the fact, noted above, that the costs of installing additional ducts are minimal. Petitioners argue that spare ducts are unnecessary because Verizon VA has spare *cable*, or can increase fiber capacity if necessary by upgrading fiber electronics. (AT&T/WCom Ex. 12 at 72.) But the presence of spare cable capacity is not a substitute for spare conduit, because spare cable capacity in a failed or flooded duct cannot be used to restore

service. The goal is to have a second duct available in which a backup cable can be installed and placed into service. (VZ-VA Ex. 122 at 142.) Nor is the ability to upgrade fiber capacity through additional electronics a substitute for spare conduit. Remote terminal capacity is not infinitely expandable, and SONET ring capacity cannot be upgraded (e.g., from an OC3 ring to an OC12 ring) without taking the ring out of service. (VZ-VA Ex. 122 at 142.)

5. Verizon's Cable And Remote Terminal Sizing Algorithms Produce Lower Per-Unit Costs.

As was repeatedly discussed at the hearing, Verizon VA does not use its utilization factors to size facilities used in its cost studies; it simply applies those factors to the costs of the facilities that are used in the studies. (Tr. at 4210 (Sanford).) While in theory, applying utilization to increase the size of the facility studied would have produced even lower unit costs, ultimately there is no valid concern that cable or remote terminal (RT) sizes used in Verizon VA's studies are understated. To the contrary, Verizon's cable pricing algorithms and its use of a 224-line RT as the smallest size RT are conservative and produce lower per-unit prices.

For distribution cable, Verizon assumed an average cable size in each distribution area equal to the number of working lines in the distribution area. This assumption conservatively overstates cable sizes because distribution cable typically must emerge from the serving area interface (SAI) in multiple directions, requiring multiple cables. (VZ-VA Ex. 122 at 99-100.) In addition, as the distribution cables branch out into the distribution area, they are tapered to

It should be noted, in any event, that AT&T/WorldCom's proposed 64% reduction for Verizon VA's conduit investment does not even follow from their arguments concerning conduit utilization, but instead is the product of arbitrary calculations and adjustments. (See VZ-VA Ex. 122 at 143-144 and Attachment L.)

smaller cables. (VZ-VA Ex. 122 at 99-100.) Thus, the average cable size used in a distribution area will be considerably smaller than even the average cable size that emerges from the SAI and certainly smaller than the total number of working lines in the distribution area. Verizon VA's use of total working lines to size distribution cable therefore produced an understatement of forward-looking distribution cable investment.

For copper feeder cable, Verizon assumed a cable size equal to the typical copper feeder cable identified for each UAA in Verizon VA's engineering survey. This typical copper feeder cable size overstates the copper feeder cable size that would be used in the forward-looking TELRIC network, because the feeder cable sizes identified in the engineering survey reflected the then-existing network in which more than 80% of all lines were served using copper feeder. (VZ-VA Ex. 122 at 98.) In the forward-looking network that Verizon VA modeled for the studies, fewer than 18% of all lines would be served with copper feeder. (VZ-VA Ex. 122 at 98.) The significantly smaller number of copper-fed lines in the forward-looking network in turn would require smaller copper feeder cable sizes, but Verizon VA used the larger typical copper feeder cable sizes from its engineering survey. Because the larger sized cable is less expensive on a permit basis, this approach produces an understatement of forward-looking copper feeder cable investment.

When calculating RT investment, Verizon VA assumed a minimum RT size of 224 lines, rather than the smaller ones proposed by Petitioners. Verizon VA's loop cost model used the per-DS0 investment for the 224-line RT, which is *lower* than the per-DS0 investment for smaller RTs. And although Petitioners argue otherwise, this assumption does not decrease utilization in small distribution areas that do not need a 224-line RT; as explained above, utilization rates are *not* generated by the model or its other assumptions, but are average fills drawn from Verizon

VA's operational network. (Tr. at 4253.) The studies thus assume the cost of a 224-RT filled at normal, average utilization. (Tr. at 4467.) Consequently, in Verizon VA's cost model, "the larger the RT, the lower the cost per unit, and actually the lower the cost for the individual loop." (Tr. at 4253 (Sanford).) Thus, Verizon VA's use of 224-line RTs in small distribution areas understates UNE loop costs.

B. Interoffice Transport (IOF)

Verizon VA's methodology for calculating the costs of the interoffice transport (IOF) and entrance facilities UNEs assumes the use of a forward-looking, cost-minimizing SONET network configuration that is capable of serving Virginia demand. This approach is consistent with the approach that has been adopted in other state proceedings and reflects reasonable assumptions about IOF in a forward-looking network.

1. Description of the IOF Cost Model

For dedicated transport and entrance facilities, ¹¹¹/ Verizon VA's IOF cost model uses a capacity costing approach similar to the one used in Verizon VA's loop cost model. The IOF cost model calculates a weighted average capacity cost for providing the transport UNEs over several representative, forward-looking SONET ring configurations. Verizon VA's approach is in contrast to the SONET network simulation approach that AT&T/WorldCom advocate in the MSM, which takes the challenge of being able to model all elements of a network to a new

The dedicated interoffice transport element consists of transmission facilities that provide dedicated transmission between Verizon VA wire centers for a particular customer. Dedicated transport is offered between Verizon VA facilities at the DS1, DS3, STS-1, OC-3, and OC-12 signaling levels. Entrance facilities are dedicated transmission facilities that connect a CLEC central office or POP to a Verizon VA central office. Verizon VA offers entrance facilities with the same transmission capabilities as interoffice dedicated transport facilities. (VZ-VA Ex. 107 at 213-14.)

extreme. As Mr. Gansert pointed out, "[T]he problem of trying to estimate the cost or trying to build a model of an actual operating interoffice transport network that has several hundred nodes as Virginia does and has hundreds and even thousands of DS3s on a point to point basis, is computationally and practically impossible. No one has ever built such a model that works."

(Tr. at 5626.)

Verizon VA's cost model has two components: (1) a fixed cost component that calculates the costs of electronics equipment (e.g., add-drop multiplexers (ADMs) and digital cross-connect systems (DCSs)) at the Verizon wire centers, and (2) a per-mile component that calculates the mileage sensitive costs of the fiber, structure, and intermediate electronics between the wire centers. Verizon VA's fixed costs, which primarily consist of electronic equipment that are located at the nodes, do not vary by the length of the SONET ring. Conversely, per-mile costs by definition vary depending on the distance traveled. (VZ-VA Ex. 107 at 215.)

To develop fixed costs, Verizon VA derived its material investments from its own database or from current contract prices and information from Verizon VA's vendors and engineering organization, and adjusted as appropriate with investment loading factors. A utilization factor was then applied. After these steps were taken, the investments were applied to a number of different circuit designs and weighted according to frequency of use, producing an average circuit investment at the DS0 level. By multiplying the DS0-equivalent for a particular service by this average circuit investment value, Verizon VA calculated the appropriate level of

investment for the service and then applied the annual cost factors. (VZ-VA Ex. 107 at 216-221.)

To calculate per mile costs, Verizon VA used fiber cable investment data from its VRUC database and then converted mileage costs from actual route miles to air miles. (VZ-VA Ex. 107, Attachment B at 46.)

2. Verizon VA's IOF Cost Model Uses Forward-Looking Assumptions About SONET Ring Architecture.

Verizon VA based its cost calculations for the IOF electronics investment on several forward-looking assumptions. Verizon VA assumed that transport would be provided exclusively on all-fiber OC48 bi-directional line switched SONET rings. (VZ-VA Ex. 107 at 220; Tr. at 5628.) Verizon VA further assumed that the typical, forward-looking ring would have six nodes. This assumption reflects an appropriate, forward-looking balance between two options: with fewer nodes per SONET ring, it often is possible for a greater number of circuits (measured in DS3 equivalents) to enter and exit the ring. However, smaller rings typically require a greater number of costly interconnections (called intermediate channel terminations) to complete transport circuits, because it is less likely that both end points of a circuit will be located on the same ring. Intermediate channel terminations are a major cost in the SONET network due, among other things, to the need for additional ports per circuit, DCS equipment, and labor. (VZ-VA Ex. 122 at 150, 152-54.)

Conversely, SONET rings with more nodes generally require fewer interconnections and allow for enhanced growth-demand flexibility. (VZ-VA Ex. 122 at 151-52.) However, larger

For entrance facilities, Verizon VA proposes a fixed monthly charge to recoup its forward-looking costs associated with providing CLECs access to those facilities, assessed using a similar methodology.

rings are more difficult to load without exhausting the fixed line capacity between adjacent nodes. As Mr. Gansert explained to the Commission, the group of Verizon experts and circuit design engineers that designed the model considered these competing concerns and concluded that "[t]he six node ring configuration was . . . the best representation of cost in an efficiently designed network." (Tr. at 5628.) The six nodes-per-ring assumption is the same one adopted in several state Section 252 proceedings. 113/

The primary parameter necessary to calculate per mile costs is the typical length of a SONET ring. Mr. Gansert explained that, just as with the loop cost study, "[t]he distance element needs to be reflective of the local geography to some extent." (Tr. at 5628.) Verizon VA accordingly assumed that in the forward-looking network, the ring dimensions would mirror the dimensions of rings in the existing network, "since the same places have to be connected." (Tr. at 5629.) Because Verizon VA only maintains data on the average distance between nodes on its SONET rings (but not the average total ring length), Verizon VA calculated the average total ring length by multiplying the average distance between nodes by the average number of nodes per SONET ring. (VZ-VA Ex. 122 at 154-55.) For these purposes, Verizon VA used an average of 3.79 nodes per ring, a figure that understates the actual number of nodes per ring for all rings in Virginia because it does not include nodes located outside of Virginia on rings that cross the border into other jurisdictions (such as Washington, D.C. or suburban Maryland). (See VZ-VA Ex. 179.) Thus, the 3.79 nodes per ring assumption produces an estimate of the forward-looking average ring length that likely is understated.

See, e.g., Recommended Decision at 150; In re Board's Review of UNE Rates, Terms and Conditions of Bell Atlantic New Jersey, Inc., Docket No. TO00060356, Summary Order of Approval (Dec. 17, 2001).

3. AT&T/WorldCom's Criticisms of Verizon's IOF Cost Model Are Without Merit.

AT&T/WorldCom originally alleged in their written testimony that they were unable to determine the basis for the assumption in Verizon VA's fixed cost calculations that SONET rings would have 16 ports per node, and suggested that Verizon VA had made a contorted miscalculation that failed to account for the requisite two ports per DS3 circuit on each ring. This criticism rang hollow at the time, given that Petitioners themselves acknowledged that Verizon had used the same IOF costing methodology in the New York UNE proceeding — in which Verizon already had responded to and refuted this same criticism. (See AT&T/WCom Ex. 12 at 128-29, 129 n.122.) Not surprisingly, after once again receiving Verizon VA's cogent explanation of its IOF calculations (VZ-VA Ex. 107 at 148-56), AT&T/WorldCom appear to have abandoned their attack, which was not even raised at the hearing.

Petitioners' remaining attack on Verizon VA's IOF cost model appears to be that not only the distance sensitive costs, but also the fixed cost calculations should have been based on the average number of nodes on Verizon VA's existing SONET rings because, as Mr. Turner testified, "you have to look at what is Verizon's current experience" to determine the forward-looking number of ports per node. (Tr. at 5630-5631; AT&T/WCom Ex. 12 at 128-29.) Of course, Verizon VA agrees with this contention: we have explained throughout these proceedings that the current network must be the starting place for any forward-looking assumption if that assumption is to have any value. And indeed, Verizon's engineers based their assumptions with respect to the forward-looking IOF network on their experience operating the

Indeed, New York is not the only state in which AT&T and/or WorldCom have raised this issue. As Mr. Gansert explained to the Commission, "the same issue has come up and been explained in detail in our testimony" in the other states where Verizon has filed its IOF model. (Tr. at 5630.)

existing network and serving IOF demand. Petitioners' insistence that the fixed costs of the forward-looking IOF network can simply be based on existing average node costs demonstrates a total absence of familiarity with IOF requirements and cost drivers and is significantly misguided.

First, while Petitioners appear to believe that smaller rings with few nodes are always more economical, this is simply not the case. As Verizon VA explained in its testimony, factors such as "the enhanced capabilities of the latest generation of SONET technology and operations" would make it economical to use larger rings than are used in the existing network. (VZ-VA Ex. 122 at 152.)

Second, AT&T/WorldCom's proposed input change entirely ignores the substantial costs associated with higher rates of SONET ring interconnection associated with such smaller rings.

As Mr. Gansert explained at the hearing:

[T]he model['s fixed cost inputs] need[] to be internally consistent. You cannot just change one parameter and not change the other. The model that was selected is a consistent estimate between the average load on the ring, the number of nodes, and the amount of interconnection between rings, all of which have a major effect on the cost of the network. So, you just can't—you just can't look at [the total number of ports] and say gee if you had to divide it by 3.79 instead of six.

(Tr. at 5633.) Rather, a change in the assumption concerning the number of nodes per ring would require an increase in the intermediate channel terminations input to reflect the greater number of ring interconnections that would be required for each circuit. (VZ-VZ Ex. 122 at 150-51.) Thus, AT&T/WorldCom's proposal to increase the number of ports per node in the

[&]quot;[T]he smaller the rings clearly the more rings you are probably going to have to traverse to get from point to point." (Tr. at 5644; see also VZ-VA Ex. 122 at 150 ("Increasing the number of nodes on a SONET ring in turn increases the probability that a DS3 circuit can be created between two offices without having to use more than one ring.").)

fixed cost calculations without increasing the number of required interconnections would produce an understatement of forward-looking transport costs.

Third, as Mr. Gansert explained, the assumption of an average of 3.79 nodes per ring would not automatically result in an average *cost* across the network of a 3.79-node ring, given that there are so many variables that would affect the costs of any particular ring configuration: "The cost of two node rings versus eight node rings, it is not a linear relationship." (Tr. at 5632.) For these and other reasons, AT&T/WorldCom's arguments do not justify disregarding the judgment of Verizon's SONET engineering experts about the forward-looking configuration of the SONET network. And in the view of those experts, as Mr. Gansert testified, "the six node ring represented the best estimate in general of the cost of traversing SONET rings." (Tr. at 5632.)

Finally, AT&T/WorldCom also criticize Verizon VA's EF&I factor for transmission transport equipment, but here too their contentions are misplaced. The 53.2% in-place factor that Verizon VA uses in this proceeding was derived from its actual 1998 accounting data with its own network *in Virginia*. (VZ-VA Ex. 122 at 156-57.) In contrast, AT&T/WorldCom offer no substantiation for their argument that the proper EF&I should be "in the 30% range." (AT&T/WCom Ex. 12 at 138.) While AT&T/WorldCom attempt to make much of the fact that Verizon utilized a 36.4% in-place factor in the New York UNE proceeding, that figure was based on the specific mix of equipment installed in New York in that particular year, which is quite different from the equipment placed in Virginia in 1998. The former accounted for a larger

Verizon VA employed appropriate common transport costs in its studies, which AT&T/WorldCom restate based only on their criticisms of Verizon VA's dedicated transport studies. For the reasons stated in this section, those criticisms are without merit, and Verizon VA's common transport rates accordingly are reasonable and well-supported in the record.

investment amount, leading to a smaller EF&I, that cannot simply be applied to the very different Virginia investment. (VZ-VA Ex. 122 at 158-59.)

C. Access To OSS Charges

AT&T/WorldCom have one primary criticism of Verizon VA's approach for recovering the costs of providing the Access to OSS UNE: in contrast to all other UNEs, Verizon VA should not be permitted to recover its costs from the CLECs that order and use the UNE. This flies in the face of the law and basic cost recovery principles and would be manifestly unfair to Verizon VA. OSS costs should be recovered from those who have caused and will continue to cause Verizon to incur those costs — the CLECs. Moreover, although AT&T/WorldCom allege generally that Verizon VA did not support its Access to OSS costs, or may have double counted costs, they offer no evidence to support these challenges. In short, Petitioners have neither demonstrated any reason why Verizon VA should not be entitled to recover in full its costs of providing the Access to OSS UNE nor proposed any basis for recalculating Verizon's Access to OSS costs.

1. Access to OSS Costs Are Forward-Looking UNE Costs That Should Be Recovered from the CLECs.

In 1996, at the insistence of AT&T/WorldCom and other CLECs, the Commission explicitly defined Access to OSS as a UNE. The Supreme Court upheld the Commission's

^{117/} Access to OSS issues are addressed in VZ-VA Ex. 107 at 242-97; VZ-VA Ex. 122 at 212-48, and VZ-VA Ex. 117 at 35-40.

See Local Competition Order at 15763 ¶ 516 ("We conclude that operations support systems and the information they contain fall squarely within the definition of 'network element."); see also id. at 15752-15768; 47 U.S.C. § 153(a)(45).

decision to treat OSS as a network element. Accordingly, under Commission rules and the Act itself, the rates for OSS, as for any other UNE, must cover its costs. As the Commission noted, "the 1996 Act requires a requesting carrier to pay the costs of unbundling, and thus incumbent LECs will be fully compensated for any efforts they make to increase the quality of access or elements within their own network. (See VZ-VA Ex. 117 at 36.) Moreover, economic principles dictate that such costs should be recovered from the cost causers; otherwise, the Commission will encourage inefficient entry and inefficient development of OSS. (See VZ-VA Ex. 117 at 36-37.)

AT&T/WorldCom argue that each party should bear its own costs or that Access to OSS costs should be treated as a cost factor rather than recovered from the users of OSS.

(AT&T/WCom Ex. 12 at 143, 145; 163-64.) What Petitioners are unable to answer, however, is the Commission staff's pertinent question: "How do we square that treatment ... with [the] argument that [Access to OSS] is an unbundled element, and under the Act there has to be a cost base[d] price for the element?" (Tr. at 3960.) AT&T/WorldCom's suggested answer — that Access to OSS costs is a "competition-onset cost" (see AT&T/WCom Ex. 12 at 145) — simply begs the question of who should pay those costs. Under the Act and Commission rules, Verizon VA is entitled to collect Access to OSS costs from CLECs who use that UNE.

Moreover, despite Petitioners' efforts to portray OSS development as simply a cost of doing business that Verizon incurred as part of the new competitive environment (AT&T/WCom Ex. 12 at 145), Verizon's costs for developing Access to OSS were not incurred to serve

^{119/} See AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366, 386 (1999).

^{120/} See 47 U.S.C. § 252(d)(1).

Local Competition Order at 15659-60 ¶ 314.

Verizon's own needs, but rather to serve the CLECs' needs. The Commission has explicitly ruled that CLECs should pay for OSS modifications incurred on their behalf, finding that it is appropriate for incumbent LECs to recover the costs of modifying their OSS for line sharing from the CLECs: "incumbent LECs should recover in their line sharing charges those reasonable incremental costs of OSS modification that are caused by the obligation to provide line sharing as an unbundled network element." The outcome should be no different here. As one federal district court noted in upholding the Kentucky Public Service Commission's decision requiring AT&T to pay for development of BellSouth's electronic interface development for OSS:

Because the electronic interfaces will only benefit the CLECs, the ILECs, like BellSouth, should not have to subsidize them. . . . AT&T is the cost causer, and it should be the one bearing all the costs; there is absolutely nothing discriminatory about this concept. 123/

Indeed, through their participation in the Industry Change Control process, the CLECs themselves largely determined what modifications to Verizon's OSS were necessary. (See VZ-VA Ex. 122 at 215.) In light of their extensive involvement in determining the magnitude of costs Verizon incurred, the CLECs should not be permitted to avoid their obligation to pay for Access to OSS.

AT&T/WorldCom also seek to avoid paying for Access to OSS on the theory that any cost incurred after the Act, or at least after the Local Competition Order (but before these

Sixth Report and Order in CC Docket Nos. 96-262 and 94-1, Report and Order in CC Docket No. 99-249, Eleventh Report and Order in CC Docket No. 96-45, In the Matter of Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers; Low-Volume Long Distance Users; Federal-State Joint Board on Universal Service, 15 FCC Rcd 12962, 13022 ¶ 144 (2000).

AT&T Communications of the South Central States, Inc. v. Bell South Telecommunications, Inc., 20 F. Supp. 2d 1097, 1104-05 (E.D. Ky. 1998).

proceedings), is "embedded" and unrecoverable in UNE rates, even though it was incurred specifically on behalf of CLEC's competitive needs. (AT&T/WCom Ex. 12 at 153-54.) But this argument simply seeks to take advantage of the timing of these proceedings. Verizon's OSS are designed to serve the needs of providing CLECs with access to a cutting-edge network, and they reflect the most forward-looking technology currently deployed. (See VZ-VA Ex. 107 at 247-48.) The costs of developing new systems and modifying existing systems cannot be dismissed as "embedded" merely because they were developed or incurred prior to these proceedings. By that logic, if Verizon had simply dragged its feet and failed to develop Access to OSS in a timely manner, Verizon would have improved its chances of recovery in these proceedings by incurring its costs later and avoiding the "embedded" label. It makes no sense to penalize Verizon for developing Access to OSS in a timely manner by denying recovery of those development costs now. (125)

Perhaps recognizing the flaws in their proposal that Verizon be left to bear its costs alone, AT&T/WorldCom argue in the alternative that the Access to OSS costs be treated akin to other so-called "regulatory costs," such as number portability costs, and recovered through charges on all end users. But the comparison to number portability cost recovery is unavailing. Congress

AT&T/WorldCom suggest that Verizon VA is improperly seeking to recover costs for interim or obsolete systems. (See AT&T/WCom Ex. 12 at 164-65; Tr. at 3914-21.) However, as Verizon explained, these systems were forward-looking at the time they were implemented; moreover, as with Microsoft's Windows, software and systems build upon previous versions as they develop and advance. The developments of the first generation are incorporated into the next generation, and thus continue to be used. (See VZ-VA Ex. 122 at 235.)

In effect, the argument would create a timing bar to ever recovering OSS development costs. If the development is done prior to the cost proceeding, the CLECs can argue that the costs are embedded; if the development has yet to be done, the costs would no doubt be criticized as entirely speculative and contested on that basis.